ceria. Such catalysts typically comprise at least one platinum group metal component, typically selected from the group consisting of platinum, palladium, rhodium, ruthenium and iridium components. There is at least one catalyst support which can be selected from silica, alumina and titanium compounds, and typically and preferably are activated compounds selected from the group consisting of alumina, silica, silica-alumina, silica-silicates, alumina-zirconia, alumina-chromia and alumina-ceria. The three-way catalyst preferably comprises an oxygen storage component preferably selected from the group consisting of cerium and praseodymium compounds, preferably cerium oxide and praseodymium oxide. The composition preferably comprises at least one stabilizer which can be selected from alkaline earth metals components including components derived from magnesium, barium, calcium and strontium. The three-way catalyst can additionally include rare earth metals, preferably lanthanum and neodymium components. The most preferred three-way catalysts useful with the close-coupled catalyst of the present invention are disclosed in U.S. Patent No. 5,597,771 entitled, "Layered Catalyst Composite" and hereby incorporated by reference.

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REMARKS

Reconsideration of the above referenced application, as amended, is respectfully requested.

Amendments

Claims 1 and 19 are indicated to be unclear as to what is meant by "second zirconium oxide", since no "first zirconium oxide" was mentioned. The terms "first" and "second" are used as defined in the specification. The term "first zirconium oxide" appears in the specification, page 12, lines 24-28 where it is indicated that the

support can be selected from the group which includes a "first zirconium compound". Reference is made to page 13, lines 7-10, where the composition is indicated to optionally include a "second zirconium compound" as a stabilizer. Reference is made to the Detailed Description of the Preferred Embodiments for specific discussion with regard to the first and second zirconium compounds. The reason there is a "second" zirconium compound appearing in claims 1 and 19 without a "first" zirconium compound is a reflection of the order of the technical description in the specification. Nevertheless, the term second zirconium has been deleted from both claims 1 and 19. These features have been inserted into new dependent claims 28 and 29. Additionally, claim 11 has been amended to depend from claim 28.

Claim 6 has been amended to delete reference to alumina-ceria as a support.

New claim 30 has been added to indicate that the close coupled catalyst is located in proximity to the engine and in communication with the exhaust outlet to be exposed to temperatures up to at least 920°C and higher. Basis is in the specification at page 9, lines 21-28, page 10, lines 14-16 and page 28, line 25.

New claim 31 has been added to indicate that the close coupled catalyst is located in proximity to the engine and in communication with the exhaust outlet to be exposed to temperatures up to at least 1100°C. Basis is in the specification at page 9, lines 21-28, and page 10, lines 14-16.

New claim 32 has been added to indicate that the close coupled catalyst is located in proximity to the engine and in communication with the exhaust outlet to be exposed to temperatures up to at least 1100°C and higher. Basis is in the specification at page 9, lines 21-28, and page 10, lines 14-16.

New claims 33 and 34 are based on the respective "optionally" clauses of original claims 1 and 19.

Applicants have added new claims 35-43 which are directed to specific embodiments of the claims from which they depend.

New claims 35-38 are directed to specific embodiments which have basis in the specification at page 15, line 29 to page 16, line 14.

New claims 39-40 are directed to specific embodiments which have basis in the specification at page 16, lines 15-21.

New claims 41-43 are directed to specific embodiments which have basis in the specification at page 9, lines 21-28 and page 12, lines 3-9. These claims indicate that the close couple catalyst is a distance of one foot or less from the exhaust outlet, and claim 43 has the close couple catalyst connected to the exhaust outlet.

For the above reasons, entry of the proposed amendments to the claims and new claims 30-47 is respectfully requested.

At pages 5, 11, and 13 minor errors have been corrected. At page 18, line 17, the specification has been amended to update U.S. Serial No. 08/265,076 to U.S. Patent No. 5,597,771.

For the above reasons, the Examiner is respectfully requested to withdraw the rejections under 35 USC '112.

Rejection of Claims Based on Obviousness-type Double Patenting

Claims 1-19 were rejected based on obviousness-type double patenting over claims in U.S. Patent No. 6,044,644; and claims 20-27 were rejected based on obviousness-type double patenting over claims in U.S. Patent No. 6,254,842. In order to overcome these obviousness-type double patenting rejections applicants have included a Terminal Disclaimer relating to the respective claim sets and corresponding cited patent.

Accordingly, withdrawal of the rejections under 35 USC '112 and double patenting-type obviousness and allowance of this application is respectfully requested.

Applicants believe that this application is now in condition for allowance of all claims therein, and such action is respectfully requested. If the Examiner disagrees or believes that for any other reason direct contact with applicants' attorney would advance the prosecution of this application to finality, the Examiner is invited to telephone the undersigned at the number given below.

Respectfully submitted,

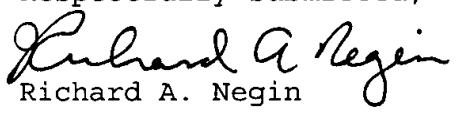

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Exhibit A

VERSION WITH MARKINGS TO SHOW CHANGES MADE IN THE CLAIMS BY THIS AMENDMENT:

1. (Amended) An article comprising:

a gasoline engine having an exhaust outlet; and

a close coupled catalyst in communication with the exhaust outlet, the close coupled catalyst comprising a close coupled catalyst composition having substantially no oxygen storage components, the catalyst composition comprising:

a support;

a palladium component;

optionally, at least one alkaline metal oxide selected from the group consisting of strontium oxide, calcium oxide and barium oxide;

optionally, at least one platinum group metal component selected from the group consisting of platinum, rhodium, ruthenium and iridium components; and

optionally, at least one rare earth oxide selected from the group consisting of neodymium oxide and lanthanum oxide~~; and~~

~~optionally, a second zirconium oxide~~.

4. (Amended) The article as recited in claim 1 further comprising a ~~second~~ zirconium oxide.

6. (Amended) The article as recited in claim 5 wherein the support comprises at least one activated compounds selected from the group consisting of alumina, silica, first ~~second~~ zirconia and silica-alumina, alumina-silicates, alumina-zirconia, and alumina-chromia~~, and alumina-ceria~~.

7. (Amended) The ~~layered catalyst composite~~article as recited in claim 6 wherein the support comprises activated alumina.

9. (Amended) The article as recited in claim 1 wherein the close coupled catalyst further comprises a ~~the~~close coupled catalyst carrier which supports the close coupled catalyst composition.

11. (Amended) The article as recited in claim ~~10~~28 wherein there is:

from about 0.50 to about 3.5 g./in^3 of activated alumina support;

at least about 50.0 g/ft^3 of the palladium component; and

from about 0.05 to about 0.5 g/in^3 of at least one alkaline earth metal component.

12. (Amended) The article as recited in claim 11 wherein there is:

from about 0.05 g/in^3 to about 0.4 g/in^3 of strontium oxide;

from about 0.0 to about 0.5 g/in^3 of the ~~second~~ zirconium oxide; and

from about 0.0 to about 0.5 g/in^3 of at least one rare earth metal oxide selected from the group consisting of lanthanum oxide and neodymium oxide.

19. (Amended) An article comprising:

a gasoline engine having an exhaust outlet;

a close coupled catalyst in communication with the exhaust outlet, the close coupled catalyst comprising a close coupled catalyst composition having substantially no oxygen storage components selected from the group consisting of cerium components and praseodymium components, the catalyst composition comprising:

a support;

a palladium component;

optionally, at least one alkaline metal oxide selected from the group consisting of strontium oxide, calcium oxide and barium oxide;

optionally, at least one platinum group metal component selected from the group consisting of platinum, rhodium, ruthenium and iridium components; and

optionally, at least one rare earth oxide selected from the group consisting of neodymium oxide and lanthanum oxide; and

~~optionally, a second zirconium oxide; and~~

a downstream catalyst located downstream of and in communication with the close-coupled catalyst, the downstream catalyst comprising an oxygen storage component selected from the group consisting of cerium components and praseodymium components.

20. (Amended) A method comprising the steps of:

operating a gasoline engine, having an exhaust gas outlet;

passing an exhaust gas stream comprising carbon monoxide and hydrocarbons, and optionally nitrogen oxide, from the exhaust gas outlet of the gasoline engine to a close coupled catalyst, the close coupled catalyst comprising a close coupled catalyst composition;

contacting the exhaust gas with the close coupled catalyst composition, the close coupled catalyst composition having substantially no oxygen storage components, the catalyst composition comprising:

a support;

a palladium component;

optionally, at least one alkaline metal oxide selected from the group consisting of strontium oxide, calcium oxide and barium oxide;

optionally, at least one platinum group metal component selected from the group consisting of platinum, rhodium, ruthenium and iridium components; and

optionally, at least one rare earth oxide selected from the group consisting of neodymium oxide and lanthanum oxide; and

~~optionally, a second zirconium oxide; and~~

oxidizing at least some of the hydrocarbon and only a portion carbon monoxide in the presence of the close coupled catalyst.

24. (Amended) The method as recited in claim ~~22~~ 20 wherein the exhaust gas from the close-coupled catalyst to a downstream catalyst comprises at least 10 percent of the carbon monoxide which passed into the close coupled catalyst when measured according to FTP 1975.